

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated June 14, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due consideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1-3 are under consideration in this application. Claims 1 and 3 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim applicant's invention.

The claims are being amended to correct formal errors and/or to better recite or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

The drawings were objected to due to informalities and the Examiner has requested correction thereof. Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. As indicated, the specification and the claims are being amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejections

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,330,047 to Kubo et al. (hereinafter "Kubo") in view of US Patent No. 6,657,696 to Aruga et al. (hereinafter "Aruga"), claim 2 was rejected as being unpatentable over Kubo in view of Aruga and further in view of US Patent No. 5,671,027 to Sasano et al. (hereinafter "Sasano"), and claim 3 was rejected as being unpatentable over Kubo. These rejections have been carefully considered, but are most respectfully traversed.

The liquid crystal display device of the invention (for example, the embodiment depicted in Fig. 1), as now recited in claim 1, comprises a first substrate SUB1 and a second

substrate SUB2 which are arranged to face each other with a liquid crystal layer LC therebetween. The first substrate SUB1 includes a plurality of gate lines GLs which extend in a first direction X, a plurality of drain lines DLs which extend in a second direction Y, and holding capacitance lines CL which extend in a first direction X. A pixel and a switching element TFT are provided to a region which is surrounded by two neighboring gate lines out of the plurality of gate lines GLs and two neighboring drain lines out of the plurality of drain lines DLs. The pixel includes a light transmitting region LTA which allows light incident from a back surface of the first substrate SUB1 to pass therethrough and a light reflecting region LRA which allows light incident from the second substrate side to be reflected thereon. The light transmitting region LTA includes a first pixel electrode TPX having the light transmitting property and the light reflecting region LRA includes a second pixel electrode RPX having the light reflecting property. An insulation film and a holding capacitance electrode CT which extends in the second direction Y (as the drain lines DLs) and is connected to one of the holding capacitance lines CL are provided below the second pixel electrode RPX. The holding capacitance electrode CT is formed in an overlapped manner to a boundary portion between the light transmitting region LTA and the light reflecting region LRA, and is formed of a material having a light shielding property (p. 12, lines 16-18).

The invention is also directed to a liquid crystal display device as recited in claim 3 which includes the elements of claim 1. In addition, claim 3 recites that the holding capacitance electrode CT extends in parallel with the drain line, and the holding capacitance electrode is formed of a material having a light shielding property.

Applicants respectfully contend that none of the cited references teaches or suggests such a “holding capacitance electrode CT extending in parallel with the drain line, and being formed of a material having a light shielding property” as does the invention.

In contrast, Kubo’s holding capacitance electrode (part of the holding capacitance line 8) extending in parallel with the gate line 2, rather than with the drain line 3 (Fig. 4).

The other cited references were relied upon by the Examiner to teach other features of the invention. These references simply fail to compensate for Kubo’s deficiencies as discussed.

Although the invention applies the general arrangement of “holding capacitance electrode CT extending in parallel with the drain line”, the invention applies the arrangement in the step structure between the light transmitting region LTA and the light reflecting region

LRA (Fig. 4) to achieve unexpected results or properties, e.g., to resolve the light leakage problem at a boundary portion between the LTA and the LRA. The presence of these unexpected properties is evidence of nonobviousness. MPEP§716.02(a).

“Presence of a property not possessed by the prior art is evidence of nonobviousness. In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (rejection of claims to compound structurally similar to the prior art compound was reversed because claimed compound unexpectedly possessed anti-inflammatory properties not possessed by the prior art compound); Ex parte Thumm, 132 USPQ 66 (Bd. App. 1961) (Appellant showed that the claimed range of ethylene diamine was effective for the purpose of producing " 'regenerated cellulose consisting substantially entirely of skin' " whereas the prior art warned "this compound has 'practically no effect.' ").

Although “[t]he submission of evidence that a new product possesses unexpected properties does not necessarily require a conclusion that the claimed invention is nonobvious. In re Payne, 606 F.2d 303, 203 USPQ 245 (CCPA 1979). See the discussion of latent properties and additional advantages in MPEP § 2145”, the unexpected properties were unknown and non-inherent functions in view of Kudo or other prior art references, since these references do not inherently achieve the same results. In other words, these advantages would not flow naturally from following the teachings of the prior art, since the prior art fails to suggest applying such a “holding capacitance electrode CT extending in parallel with the drain line” in the step structure in Fig. 4.

Applicants further contend that the mere fact that one of skill in the art could rearrange the Kudo’s holding capacitance electrode to meet the terms of the claims is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for one skilled in the art to provide the unexpected properties, such as to resolve the light leakage problem at a boundary portion between the LTA and the LRA, without the benefit of appellant's specification, to make the necessary changes in the reference device. *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). MPEP§2144.04 VI C.

In contrast, Kudo only discloses an example to change a ratio of the transmission area to the reflection area (Figs. 3-4; Col. 15, lines 20-27), but not any light leakage problem at a boundary portion between the LTA and the LRA.

The cited prior art references and their combinations fail to teach or suggest each and

every feature of the present invention as recited in independent claims 1 and 3. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

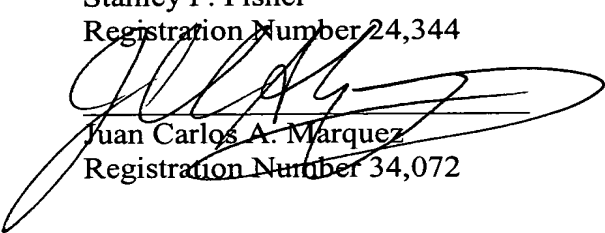
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344



Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive, Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

December 13, 2005

SPF/JCM/JT